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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/620,755 | 07/15/2003 | Ragulan Sinnarajah | 030275 | 8985 |
| 23696 7590 10/12/2007 QUALCOMM INCORPORATED 5775 MOREHOUSE DR. SAN DIEGO, CA 92121 | | | EXAMINER MEHRPOUR, NAGHMEH | |
| | | | ART UNIT 2617 | PAPER NUMBER |
| | | | NOTIFICATION DATE 10/12/2007 | DELIVERY MODE ELECTRONIC |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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| | | | |
|------------------------------|------------------------|---------------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 10/620,755 | SINNARAJAH ET AL. | |
| | Examiner | Art Unit | |
| | Naghmeh Mehrpour | 2617 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 August 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-72 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-72 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

1. **Claims 1-3, 8, 11-12, 16, 19-20, 26, 33, 38, 44, 47-48, 52, 55-57, 65-66, 67, 70,** are rejected under 35 U.S.C. 102(e) as being anticipated by Kinnavy (US patent Number 7,047,005).

Regarding claims 1, 11, 19, 37, 47, 55, 65, Kinnavy teaches method for providing short-slot-cycle paging information to a base station (BS)(col 6 lines 17-28), comprising:

a receiver capable of receiving information from a communication device (CD) (col 2 lines 55-66, see figure 3);

a transmitter capable of transmitting information to the CD (col 2 lines 55-56, see figure 3); and

a processor 344 capable of carrying out a method for providing short-slot-cycle paging (col 2 lines 5-30, see figure 3), the method comprising:

indicating to the CD that the BS is capable of short-slot-cycle paging (col 2 lines 5-30);

receiving information from the CD, indicating that the CD is also capable for short-slot-cycle paging (col 2 lines 5-30, see figure 3); and

paging the CD based on the received information (see figure 3, col 2 lines 55-67, col 3 lines 1-3).

Regarding claims 2, 12, 20, 33, 38, 48, 56, 66, Kinnavy inherently teaches a method of claim 1, further including setting a negative slot-cycle-index value for said short-slot-cycle paging (col 3 lines 3-35).

Regarding claims 3, 21, 31, 39, 49, 57, 67, Kinnavy inherently teaches a wherein the negative slot-cycle-index value includes one of "-1," "-2," "-3," or "-4" (col 4 lines 39-67).

Regarding claims 8, 16, 26, 34, 44, 52, 62, 70, Kinnavy inherently teaches a method of claim 7, further including setting a desired slot cycle duration in a SLOT-CYCLE-INDEX field (col 2 lines 5-30, col 4 lines 5-39).

Art Unit: 2617

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. **Claims 6, 9-10, 17-18, 24, 27-28, 35-36, 45-46, 53-54, 63-64, 71-72, are** rejected under 35 U.S.C. 103(a) as being unpatentable over Kinnavy (US patent Number 7,047,005).

Regarding claims 6, 24, 42, 60, Kinnavy does not specifically mention a method of claim 1, wherein said determining includes examining whether AUTO_MSG_SUPPORTED field is set to "1". However the Examiner takes official notice that designing different field and setting different number is a programmer choice. Therefore, it would have been obvious to ordinary skill in the art at the time the invention was made to combine the above teaching of with Kinnavy, in order to provide reduction of over head and caused by location update and to enable efficient paging.

Regarding claims 7, 15, 25, 33, 43, 51, 61, 69, Kinnavy does not specifically mention that a method of claim 1, wherein said indicating includes setting WLL_INCL to "1" in one of registration message, origination message, or page response message. However the Examiner takes official notice that designing different field and setting different number is a programmer choice. Therefore, it would have been obvious to

Art Unit: 2617

ordinary skill in the art at the time the invention was made to combine the above teaching of with Kinnavy, in order to provide reduction of over head and caused by location update and to enable efficient paging.

Regarding claims 9, 17, 27, 35, 45, 53, 63, 71, Kinnavy does not specifically mention a method of claim 7, further including setting a desired slot cycle duration in a WLL-DEVICE-TYPE field (col 7 lines 1-60). However the Examiner takes official notice that designing different field and setting different number is a programmer choice. Therefore, it would have been obvious to ordinary skill in the art at the time the invention was made to combine the above teaching of with Kinnavy, in order to provide reduction of over head and caused by location update and to enable efficient paging.

Regarding claims 10, 18, 28, 36, 46, 54, 64, 72, Kinnavy does not specifically mention that a method of claim 1, wherein said indicating includes setting a SLOT-CYCLE-INDEX with a most significant bit of "1" in one of registration message, origination message, or page response message (col 7 lines 1-59). However the Examiner takes official notice that designing different field and setting different number is a programmer choice. Therefore, it would have been obvious to ordinary skill in the art at the time the invention was made to combine the above teaching of with Kinnavy, in order to provide reduction of over head and caused by location update and to enable efficient paging.

Art Unit: 2617

3. **Claims 4-5, 13-14, 22-23, 31-32, 40-41, 58-59, 68,** are rejected under 35 U.S.C. 103(a) as being unpatentable over Kinnavy (US patent Number 7,047,005) in view of Zhang et al. (US Publication 2004/0179492 A1).

Regarding claims 4, 13, 22, 31, 40, 50, 58, Kinnavy fails to teach a method of claim 1, wherein said determining includes examining system parameter messages including extended system parameter messages (ESPM). However, Zhang teaches determining includes examining system parameter messages including extended system parameter messages (ESPM) (0314). Therefore, it would have been obvious to ordinary skill in the art at the time the invention was made to combine the above teaching of Zhang with Zhang, in order to provide reduction of over head and caused by location update and to enable efficient paging.

Regarding claims 5, 14, 23, 32, 41, 59, 68, Kinnavy fails to teach a method of claim 1, wherein said determining includes examining system parameter messages including ANSI-41 system parameter messages (A41SPM). However, Zhang a method of claim 1, wherein said determining includes examining system parameter messages including ANSI-41 system parameter messages (A41SPM) (0320). Therefore, it would have been obvious to ordinary skill in the art at the time the invention was made to combine the above teaching of Zhang with Zhang, in order to provide reduction of over head and caused by location update and to enable efficient paging. Kinnavy modified by Zhang does not specifically mention a method of claim 1, wherein said determining includes

examining whether AUTO_MSG_SUPPORTED field is set to "1". However the Examiner takes official notice that designing different field and setting different number is a programmer choice. Therefore, it would have been obvious to ordinary skill in the art at the time the invention was made to combine the above teaching of with Kinnavy modified by Zhang, in order to provide reduction of over head and caused by location update and to enable efficient paging.

Response to Arguments

4. Applicant's arguments filed 8/23/07 have been fully considered but they are not persuasive.

In response that that Kinnavy fails to teach "*determining if either the BS or the CD is capable if short-slot cycle*"

The Examiner asserts that Kinnavy teaches a system wherein a mobile station 160 may enable a preferred SCI associated with a preferred slot cycle to monitor for transmission from the base station 140 via the paging channel 210 in accordance with a preferred embodiment of the invention. In particular, the mobile station 160 receives control information associated with slot cycles operable by the base station 140 (i.e., the capability of the base station 140). Based on the control information, the mobile station 140 may adjust the operating SCI to a preferred SCI corresponding to a preferred slot cycle, which is one of the slot cycles operable by the base station 140.

In response that that *"Kinnavy teaches a system/method that a phone use more power, and Kinnavy is less favorable for conserving power"*.

The Examiner asserts that Kinnavy shows in examples of the preferred SCI may be, but is not limited to, a slot number from one of including one of zero (0), one (1), two (2), three (3), four (4), five (5), six (6) and seven (7). The preferred slot cycle may be longer than the operating slot cycle if the preferred SCI is greater than the operating SCI. That is, the slot may reoccur less often in the preferred slot cycle than in the operating slot cycle so that mobile station 160 monitors for transmission from the base station 140 less frequently during the preferred **slot cycle to converse power**.

For example, the mobile station 160 may enable a preferred SCI of four (4), which may correspond to a preferred slot cycle of 20.48 seconds, to conserve battery power of the mobile station 160 rather than using a lower operating SCI (i.e., an operating SCI of three (3) or less). The mobile station 160 transmits the preferred SCI to the base station 140 via a reverse control channel 220 (e.g., a reverse access channel (R-ACH)) to indicate that the mobile station 160 is operating at the preferred slot cycle associated with the preferred SCI. As a result of informing the base station 140 with the preferred SCI, the mobile station 160 is in communication with the base station 160 via the communication resource 210 during a slot that reoccurs based on **the preferred slot cycle**. Thus, in the example described above, the mobile station 160 monitors for transmission from the base station 140 via the communication resource 210 during a slot that reoccurs every 20.48 seconds. A user may select a preferred SCI that is less than operating SCI such that the preferred slot cycle is shorter than the operating slot

Art Unit: 2617

cycle. For example, emergency personnel such as police officers and firefighters may select and adjust their mobile stations to operate at a preferred slot cycle shorter than the operating slot cycle to be more accessible when they are on duty. Thus, the mobile station 160 may operate at a preferred slot cycle to **conserve battery power** and/or to meet the need of the user.

In response to applicant's argument that the Kinnavy fails to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e. the way the application explains the "short-slot-cycle" term which is different than the conventional "short-slot-cycle") are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Conclusion

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

Art Unit: 2617

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

6. Any responses to this action should be mailed to:

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Naghmeh Mehrpour whose telephone number is 571-272-7913. The examiner can normally be reached on 8:00- 6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marsha Banks-Harold be reached (571) 272-7905.

The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

NM

September 17, 2007

NAGHMEH MEHRPOUR
PRIMA